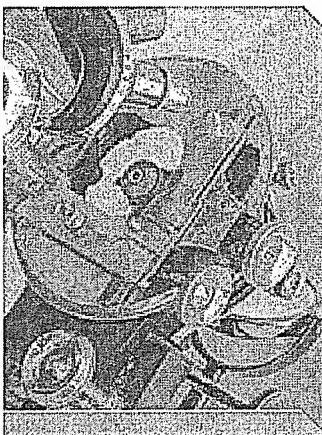


**ACCESS**  
**Science** [Subscriber Log-In](#)

-  [Home](#)
-  [View Sample Content](#)
-  [Free Trial](#)
-  [Flash Tour](#)
-  [Order](#)
-  [About Us](#)
-  [Reviews](#)

**Search Encyclopedia:**[GO](#)

---

**Article preview from the McGraw-Hill Encyclopedia of Science & Technology Online**

---



-  [Chemistry](#)
-  [Organic chemistry](#)
-  [Chemistry](#)
-  [Polymer chemistry](#)

## Branched polymer

[Article Outline](#)

**A** polymer chain having branch points that connect three or more chain segments. Examples of branched polymers include long chains having occasional and usually short branches comprising the same repeat units as the main chain (nominally termed a branched polymer); long chains having occasional branches comprising repeat units different from those of the main chain (termed graft copolymers); main chains having one long branch per repeat unit (referred to as comb polymers); and small core molecules with branches radiating from the core (star polymers). So-called starburst or dendritic polymers are a special class of star polymer in which the branches are multifunctional, leading to further branching with polymer growth. Star, comb, and starburst polymers, (Fig. 1), especially the last, represent interesting molecular structures that may lead to unusual supramolecular structures (for example, micelles and liposomes) that mimic the functions of complex biomolecules.

**...Full article available through subscribing libraries.**

**Gary E. Wnek**[Look here for more information about this article.](#)

DOI 10.1036/1097-8542.757243

**Education**[Customer Privacy Notice](#)

Copyright ©2000-2004 The McGraw-Hill Companies. All rights reserved. Any use is subject to the [Terms of Use](#) and [Notice](#). [Additional credits](#) and copyright information. For further information about this site contact [AccessScience@romnet.com](mailto:AccessScience@romnet.com). Last modified: Sep 30, 2003.

